

dispute that is irrelevant or unnecessary under applicable law is of no value in defeating a motion for summary judgment. On the other hand, “summary judgment will not lie if the dispute about a material fact is ‘genuine.’” *Id.*

“[A] fact is ‘material’ within the meaning of Rule 56(a) if the dispute over it might affect the outcome of the lawsuit under the governing law.” *O’Donnell v. City of Cleveland*, 838 F.3d 718, 725 (6th Cir. 2016) (citing *Anderson*, 477 U.S. at 248). A dispute is “genuine” “if the evidence is such that a reasonable jury could return a verdict for the non-moving party.” *Peeples v. City of Detroit*, 891 F.3d 622, 630 (6th Cir. 2018).

The party bringing the summary judgment motion has the initial burden of identifying and citing specific portions of the record—including, *inter alia*, depositions, documents, affidavits, or declarations—that it believes demonstrate the absence of a genuine dispute over material facts. *Pittman v. Experian Info. Sols., Inc.*, 901 F.3d 619, 627–28 (6th Cir. 2018); Fed. R. Civ. P. 56(c)(1)(A). If the non-moving party asserts that a fact is genuinely disputed, it generally “must support the assertion by . . . citing to particular parts of materials in the record.” Fed. R. Civ. P. 56(c)(1)(A); *see also Pittman*, 901 F.3d at 628 (“The nonmoving party ‘must set forth specific facts showing that there is a genuine issue for trial.’” (quoting *Anderson*, 477 U.S. at 250)). The court must view the facts and draw all reasonable inferences in favor of the non-moving party. *Pittman*, 901 F.3d at 628. Credibility judgments and the weighing of evidence are improper. *Hostettler v. Coll. of Wooster*, 895 F.3d 844, 852 (6th Cir. 2018).

The standard of review for competing motions for summary judgment in which two defendants seek to implicate each other does not differ from the standard applied when a motion is filed by only one party. *Ferro Corp. v. Cookson Grp., PLC*, 585 F.3d 946, 949 (6th Cir. 2009); *Taft Broad. Co. v. United States*, 929 F.2d 240, 241 (6th Cir. 1991). The court must always

“evaluate each party’s motion on its own merits, taking care in each instance to draw all reasonable inferences against the party whose motion is under consideration.” *Taft*, 929 F.2d at 248.

II. PROCEDURAL HISTORY

Plaintiff Anthony Baker initiated this lawsuit by filing a Complaint against Nyrstar in the Circuit Court for Montgomery County, Tennessee in April 2020. Baker asserted a negligence claim based on his having allegedly sustained permanent injury from an exposure to sulfur dioxide (sometimes referred to herein as “SO₂”) while working at Nyrstar’s zinc roasting facility in Clarksville, Tennessee in August 2019. After Nyrstar filed an Amended Answer in December 2021, asserting a comparative negligence defense and attributing fault to Outotec for the first time, the plaintiff filed his Amended Complaint on February 25, 2022, naming Outotec as an additional defendant. Outotec then promptly removed the case to this court on the basis of diversity jurisdiction. (Doc. No. 1; *see* Doc. No. 1-1 (Amended Complaint).) In the Amended Complaint, Baker claims that both Nyrstar and Outotec, despite having a duty to do so, failed to warn him about sulfur dioxide at the Nyrstar facility, to train him about the potential hazard posed by sulfur dioxide, or to provide personal protective equipment to mitigate the risk posed by sulfur dioxide. (Doc. No. 1-1.)

Both defendants have now filed Motions for Summary Judgment, supporting Memoranda of law, Statements of Undisputed Material Facts, and vast quantities of evidentiary material.¹ In

¹ The court notes that the parties’ multitude of duplicative filings and confusing record citations have made locating the sources cited in their Statements of Undisputed Facts (and responses thereto) particularly difficult and time-consuming. The court is utterly perplexed by the fact that all of the parties filed either all or many of their summary judgment exhibits twice, as attachments both to their Statements of Facts and their Memoranda, thus unnecessarily swelling and complicating the docket. They have also unnecessarily filed a multitude of deposition excerpts, even excerpts already in the record and excerpts for depositions for which entire transcripts have already been filed. For many of these documents, the parties cite to the original transcript page numbers and/or bates labels added by the parties, which are completely covered by the CM/ECF

its filings Nyrstar argues, generally, that the plaintiff's negligence claim fails as a matter of law, as to all defendants, because the plaintiff cannot show that a purported sulfur dioxide exposure was either the cause in fact or the proximate cause of his alleged injury, for purposes of his negligence claim. More precisely, Nyrstar argues that (1) the plaintiff has no evidence to establish that he was actually exposed to a sufficient concentration of sulfur dioxide on August 8, 2019 to cause his alleged injuries; and (2) the plaintiff's alleged respiratory and pharyngeal issues pre-existed his alleged sulfur dioxide exposure and were not proximately caused by any alleged exposure. Nyrstar also argues that, to the extent there was any negligence, the fault for such harm cannot be attributed to Nyrstar and instead lies with Outotec or with other contractors or subcontractors involved on the project, specifically J.W. McDougall Co. ("McDougall") and the plaintiff's employer, Industrial Contractors, Inc. ("ICI"). (Doc. No. 49, *passim*.)² For its part, Outotec adopts Nyrstar's cause-in-fact and proximate cause arguments and further contends that it had no duty to the plaintiff and, therefore, cannot be liable for any injuries he sustained. (Doc. No. 52, *passim*.)

The plaintiff responded to both motions and Statements of Undisputed Material Fact, filed his own evidentiary material and a Statement of Additional Facts, asserting that material factual disputes preclude summary judgment. Outotec also filed a Statement of Additional Facts; Nyrstar responded to the plaintiff's and Outotec's Statements of Additional Facts, and both defendants filed Reply briefs.

footer added by the court's electronic filing system, thus adding to the difficulty of locating the parties' citations.

² The plaintiff has never sought to add McDougall or ICI as defendants in this action—despite Nyrstar's identification of them as comparative tortfeasors—presumably because any claim against them would be governed by Tennessee's Worker's Compensation Statute.

III. FACTS³

A. Nyrstar's Roaster Rebuild Project

Nyrstar operates a facility in Clarksville, Tennessee that produces zinc and associated chemicals. The facility includes a machine that roasts zinc concentrate into zinc oxide and other byproducts, which is referred to as a "roaster." The Tennessee Department of Environment and Conservation ("TDEC") issues Nyrstar a permit to operate this roaster.

The roasting process creates sulfur dioxide gas as a byproduct. (Doc. No. 51-2, Cook July 7, 2021 Dep. ("Cook 2021 Dep.") 26.)⁴ The sulfur dioxide emissions are supposed to be routed to an acid plant or other emissions control devices and then emitted from the onsite tailgas stack located in the acid plant. (*Id.* at 28, 34–35.) As part of the permitting process, TDEC requires Nyrstar to monitor the levels of sulfur dioxide emitted from the tailgas stack. (*Id.* at 26–27.) Nyrstar also maintains two ambient monitoring stations near the property boundary. (*Id.* at 38.)

On June 20, 2018, TDEC issued a Notice of Violation to Nyrstar related to a leakage of sulfur dioxide from the roaster. In response to TDEC's Notice of Violation, Nyrstar developed a plan to address the leak. As of April 2019, after its attempts to repair and patch the old roaster proved unsuccessful, Nyrstar determined that the roaster would need to be completely replaced to stop any leakage. It subsequently developed a plan to replace and rebuild the roaster.

As a zinc smelting operation, Nyrstar was not itself equipped to build, assemble, install, or bring online a new roaster, so, in early 2019, Nyrstar contracted with McDougall to fabricate and assemble the new roaster. Although the parties fail to distinguish between them, there are at least

³ Statements for which no citation to the record is provided are undisputed for purposes of either defendant's Motion for Summary Judgment, unless otherwise indicated.

⁴ All of the complete deposition transcripts in the record are in condensed form. For clarity, the court refers to them by the original pagination, rather than the page numbers assigned by the court's electronic filing system.

two agreements between Nyrstar and McDougall:⁵ the “Agreement for Supply of Goods and Services” calling for the “Provision of Roaster Steel Shell in five modules,” signed by the parties in April and May 2019 with a commencement date of May 1, 2019 (Doc. No. 47-3, at 26–50) (the “Nyrstar-McDougall May 2019 Supply Agreement”), and the “Framework Agreement for Supply of Goods and Services,” described on its face as providing for the “Provision of Fabrication and Mechanical Services,” signed on July 19, 2019 with a commencement date of July 1, 2019 (Doc. No. 50-1) (the “Nyrstar-McDougall July 2019 Framework Agreement”). Pursuant to these agreements, McDougall contracted to provide Nyrstar with a new roaster steel structure to replace the roaster’s dome, upper vertical wall, transition wall, and lower vertical wall.

Nyrstar also entered into several contracts with Outotec, one of which was the Services Framework Agreement for the “Provision of Roaster Rebuild Construction Management Services,” with a June 1, 2019 commencement date (Doc. No. 51-7, at 2, 4) (“Outotek Management Agreement”), according to which Outotec would provide certain construction management services to supplement and support Nyrstar’s roaster rebuild project.⁶ As part of this responsibility, Outotec was tasked with monitoring McDougall’s fabrication work, progress, schedule, and coordination to ensure that the timeline for shutdown⁷ and demolition stayed on track.

⁵ There actually appears to have been a third contract that went into effect June 17, 2019 (*see* Doc. No. 51-5, Cook 2023 Dep. 224–25), but that version does not appear to be in the case record.

⁶ Nyrstar and Outotec also executed an agreement pursuant to which Outotec would provide “roaster demolition services,” with a July 22, 2019 commencement date. (Doc. No. 47-2, at 160, 162.) The parties do not appear to rely on this agreement as a source of Outotec’s liability in this case.

⁷ The old roaster, despite the leak, remained “online” and operational while the new roaster fabrication took place. (Cook 2021 Dep. 122–23.)

According to Nyrstar, the new roaster was to be assembled by McDougall “under the direction” of Outotec, “onsite at Nyrstar.” (Doc. No. 46, Cook Aff. ¶ 13.) Outotec disputes that McDougall acted under Outotec’s “direction,” pointing to the testimony of Jorge Bravo, as McDougall’s corporate representative, that he was not initially aware that Outotec was involved and never even saw the name Outotec until sometime during the course of this litigation. (Doc No. 51-10, Bravo Dep. 40.) Bravo was onsite approximately weekly for a period of time during late July/early August 2019, but he never talked to anyone from Outotec while he was on site. (*Id.* at 39, 41). His primary contact was Rick Gordon from Nyrstar. (*Id.* at 41.) According to Bravo, McDougall “provide[d] all necessary supervision,” including safety supervision, for its own employees in its work area. (*Id.* at 73.) He could not “speak to anything outside of the area that [McDougall] employees were at.” (*Id.* at 73–74.) To his knowledge, McDougall did not report to Outotec or anyone else, aside from Nyrstar. (*Id.* at 75.)

In any event, it is undisputed that McDougall fabricated the new roaster dome in sections and then assembled the sections to form the new roaster dome. Some of the fabrication work was performed at McDougall’s facility in Nashville, and some of it was performed in a dedicated area onsite at Nyrstar’s Clarksville facility.

To complete the assembly of the new roaster at the facility, McDougall brought in its own employees and hired subcontractors, including ICI, which employed the plaintiff, Anthony Baker. As relevant here, McDougall contracted with ICI to provide a crane and operator at Nyrstar on August 8, 2019. ICI sent Baker to Nyrstar to perform this job.⁸

⁸ Baker had previously been at Nyrstar, operating a crane for ICI as directed by McDougall, on July 16, 2019. (Doc. No. 61-2, Baker Jan. 2023 Dep. 30.) That day, his task was to “[l]ift dome of fabricated roaster from platform and move to side.” (*Id.* at 32–33.) He performed this job and left Nyrstar’s premises that day without incident. (*Id.* at 67.)

B. The Plaintiff's Injury

On that date, Baker was directed by McDougall to lift the newly fabricated roaster dome from the fabrication area at the facility and set it into place atop the body of the new roaster. Another ICI employee, Joseph Haynes, accompanied Baker on August 8, 2019 as the “counterweight man,” hauling counterweights for the crane in a different vehicle. Wesley Albright, another ICI employee, was also at the Nyrstar facility that day, and he assisted Haynes and Baker with the lift. (*See* Doc. No. 51-9, Albright Dep. 29–30.)

Baker completed the lift and then dismantled the crane and repacked the counterweights. (Baker Jan. 2023 Dep. 77–78.) He then tried to leave the facility but was unable to exit the way he had the first time he was there, because of construction equipment blocking the road. (*Id.* 78–79.) He ended up having to back down the alley on which the roaster was located to turn the crane around. While backing up, he noticed a ladder in the road, so he exited the cab of the crane to move it out of the way. (*Id.* at 79–80.) According to the plaintiff, as soon as he exited the crane and “stepped past the door,” his eyes and nose started burning. (*Id.* at 85.) He noticed a smell “like you had struck a match, of the old-timey matches.” (*Id.*) Eventually his chest began burning as well. (*Id.* at 86.)

Despite the smell and the burning, Baker estimates that he was outside the crane for 15 to 30 minutes, because he “made sure all [his] pins were in [the] outriggers that keep them from coming out going down the road” and “hook][ed] the block back to the crane to keep it from flopping,” before moving the ladder, doing a “walk-around” of the crane, and getting back into the cab of the crane. (*Id.* at 86–88.) He explained that the process he went through before proceeding normally takes that long. (*Id.* at 88 (“Yes, sir. The suspension has to be leveled. It has to be locked

off. I had to do all of that.”).⁹ Once he got back in the crane, he was able to pull out and leave the way he came in. He was not required to stop at the guard shack, as the guard “motioned [him] on and opened the gate,” so he drove the crane back toward ICI’s facility. (*Id.* at 89–90.) Haynes, who was a “couple hundred” feet away and still inside the cab of his truck when Baker exited his cab, testified that, although the entire Nyrstar grounds “stinks,” he did not notice anything particularly bothersome or irritating or that caused him to cough. (Haynes Dep. 61.)

After leaving Nyrstar, Baker called Wesley Albright and told him he had “breathed in something that [was] making it hard to breathe.” (Doc. No. 61-4, Baker 2021 Dep. 58.) Baker did not specifically recall what Albright told him, but Albright testified that he told Baker during this telephone call that the only thing he knew of that might cause difficult breathing was sulfur dioxide gas. (Albright Dep. 33; *see also* Baker 2021 Dep. 59.)¹⁰

Baker testified that he started to feel worse while he was driving. By the time he and Haynes stopped for gas in Dickson, approximately an hour and one-half later, blood was dripping from his nose. (Baker Jan. 2023 Dep. 94.) He told Haynes that he had a bad taste in his mouth, and Haynes also noticed that Baker was coughing. (Haynes Dep. 62.) By the time they got back to Columbia, Baker’s chest was hurting more, and he was coughing and spitting blood on the ground. (Baker Jan. 2023 Dep. 95; *see also* Haynes Dep. 54 (“He was coughing pretty hard and it was—seems

⁹ There is a factual dispute as to how long Baker was out of the crane. Both Haynes and Albright witnessed him exit the cab and estimate he was out of the crane for no more than five minutes. (Albright Dep. 32; Doc. No. 51-19, Haynes Dep. 58–59.)

¹⁰ Albright worked with McDougall on the Nyrstar project, operating a crane to “set[] steel structural pieces to produce the roaster,” from the end of June 2019 until sometime in September 2019. (Albright Dep. 13–14, 19.) He testified that he learned within a few days of arriving onsite that there was “some gas, SO₂ or something [that] could blow through, could make you sick.” (*Id.* at 24.) There was “talk amongst the group” of McDougall employees about it.” (*Id.*) He was aware of a “pipe bridge” that carried sulfur dioxide through the work area, and he also remembered warning signs about the presence of sulfur dioxide. (*Id.* at 25–26.)

like I remember it being a little red-ish, he was spitting up some stuff . . .”).) Haynes offered to take him to the doctor, but Baker assured Haynes he would be all right. (Haynes Dep. 54.) Baker told his supervisor, Will Sims, that he had “got[ten] into something.” (Baker Jan. 2023 Dep. 94.) Sims told him to take some ibuprofen and go home, and he would check on him later. (*Id.*)

At his employer’s insistence, Baker went the next day (August 9, 2019) to the Hickman Medical Clinic, where he reported that he had been at work the previous day and, when he was “turning equipment around he was met by odor and immediately experienced burning of eyes, skin, excessive coughing, burning sensation to breath [sic].” (Doc. No. 47-14, at 87.) He reported that “sulfur dioxide was in close proximity and was told by his employer to seek medical care because chemical can cause airway irritation/difficulty breathing.” (*Id.*)¹¹ He was noted on that day to have “excessive coughing,” with “significant coughing noted the entire visit maybe able to speak 3 word sentences.” (*Id.*) He was assessed with a cough and acute bronchitis¹² with bronchospasm. (*Id.* at 87–88.)

Due to his ongoing symptoms, he presented to Dr. Thomas Atwater at Midstate Pulmonary on September 6, 2019. His physical exam notes for that date indicate that he was “in mild distress because of frequent coughing, difficult for him to talk because of frequency of cough.” (Doc. No. 47-14, at 93.) Baker was unable to perform a pulmonary function test due to his constant coughing. (*Id.*) A chest x-ray that day was essentially normal, and Dr. Atwater ordered a bronchoscopy that took place on September 26, 2019. The bronchoscopy findings were essentially normal, except

¹¹ Although Baker did not recall when he learned that he had potentially been exposed to sulfur dioxide, the medical treatment notes establish that he must have known before that visit. He testified that, prior to August 8, 2019, he did not know what sulfur dioxide smelled or felt like. (Baker Jan. 2023 Dep. 25.)

¹² Baker’s treating physician, a pulmonary specialist, Dr. Carla Sevin, explained that bronchitis simply means inflammation of the airways. (Doc. No. 51-30, Sevin Dep. 154.)

that the “[m]ucosa of main carina, bilateral mainstem bronchi, and lobar bronchi appeared pale and abnormal,” and there was “erythema at the orifice of the RML bronchus.” (*Id.* at 96.)

When Baker’s condition failed to fully resolve with treatment over the next few months, Dr. Atwater referred him to Dr. Carla Sevin, a pulmonologist certified in pulmonary and critical care. (*Id.* at 107.) Dr. Sevin, a specialist in occupational lung diseases, has been treating Baker since January 2020. (Sevin Dep. 143.) She has diagnosed him with work-associated irritable larynx syndrome, and she attributes the condition to his exposure to sulfur dioxide on August 8, 2019. (*Id.* at 97, 103–04, 179.) In reaching that conclusion, she ruled out all of the other obvious and relevant potential causes, including asthma, gastroesophageal reflux disease (“GERD”), bronchitis, pneumonia, asbestos exposure, and laryngopharyngeal reflux, among others. (*Id.* at 153–56.)

According to the plaintiff, he has never completely recovered from the injury he sustained on August 8, 2019, and Dr. Sevin has testified that his condition is permanent. (Sevin Dep. 156.) As discussed in more detail below, Nyrstar purports to dispute both the permanence of the plaintiff’s condition and that his visit to Nyrstar on August 8, 2019 was the “cause of his alleged condition of irritable larynx,” citing Doc. Nos. 47-13 (the entirety of Gale Hoffnagle’s Rule 26 Expert Disclosure of), 47-10 (the entirety of Mike Berg’s Rule 26 Expert Disclosure), and 47-14, at 45–84 (Exhibits 5–10) (medical records from 2014 and 2015).

Citing the observations of his co-workers, the plaintiff states that his condition after he left the Nyrstar facility on August 8, 2019 was much different than the morning before he went. (Doc. No. 65, Pl.’s Statement of Additional Facts, ¶ 17.) Nyrstar purports to dispute that the plaintiff’s condition was significantly different before he went to Nyrstar, citing treatment records from 2014. (Doc. No. 72, Nyrstar Resp. to Pl.’s Statement of Additional Facts ¶ 17.) However, the 2014 treatment records on which Nyrstar relies show only that Baker had a persistent cough following

a virus that resolved within approximately eight weeks. (*See* Doc. No. 47-14, at 56–76; *see also* Sevin Dep. 108 (“He had an episode of flu [in 2014] where he has a postviral cough, and it resolved by probably eight weeks, which is very typical for a postflu, postviral cough.”); *id.* at 177 (“[W]e don’t have any documentation that he had cough after that in the intervening five years.”).)

In addition to the testimony of Dr. Sevin, the plaintiff offers the opinion of Neil Zimmerman, an expert Certified Industrial Hygienist, according to whom Baker

was definitely, clearly and without any question whatsoever exposed to excess SO₂. The fact remains that he was exposed to SO₂ to the extent that he had immediate reactions of taste, smell, irritation and cough, difficulty breathing, bleeding from the nose and mouth within hours of exposure and long-term respiratory system damage, all consistent with an excess exposure to SO₂.

(Doc. No. 47-11, Zimmerman Report 6.)

C. General Safety Measures and Responsibilities for the Roaster Rebuild Project

Nyrstar’s Contractors Safety Rules & Regulations state that it is Nyrstar’s policy to “require that all contractors . . . adhere to all our applicable Safety Rules & Regulations.” (Doc. No. 51-18, at 2.) Jorge Bravo, McDougall’s safety director, agreed that McDougall’s agreement with Nyrstar required McDougall to comply with Nyrstar’s safety standards. (Bravo Dep. 25, 69–70.) Darryl Skelton, McDougall’s project manager for the Nyrstar roaster project, testified that McDougall generally relied on the site owner to tell it what personal protective equipment (“PPE”) was required for the site, over and above the basic safety vest, hard hat, safety glasses, and gloves that McDougall employees would always have with them. (Doc. No. 61-1, Skelton Dep. 23–24.) Skelton recalled that Nyrstar had “certain rules” that had to be followed and that Nyrstar sent McDougall a list of additional PPE items it required, the only one of which Skelton remembered was metatarsal boots. (*Id.* at 22–23.) He testified that every McDougall employee or subcontractor who worked onsite at Nyrstar went through “orientation at the gate” and that McDougall provided “OSHA documentation” and drug screen information for each of its workers. (*Id.* at 40–41.)

Nyrstar asserts that it disseminated safety guidelines to the various contractors working on the project (including McDougall), who were then supposed to ensure that their employees and subcontractors reviewed and followed such guidelines, and that Nyrstar expected all of its contractors' employees and subcontractors' employees to comply with the "relevant and applicable safety policies and procedures disseminated." (Doc. No. 47, Nyrstar Statement of Undisputed Material Facts ("SUMF") ¶ 14.) In support of these assertions, Nyrstar cites to Cook's deposition testimony about a document entitled "Roaster Shut Induction," which appears on its face to cover September–October 2019, the period of "downtime associated with the project," when Outotec would have been involved with the demolition. (Cook 2021 Dep. 141–43.) Cook stated that the document was created to "give to people who were coming to work on this project," meaning "[c]ontractors, generally." (*Id.* at 144.) He understood that it would, "for example," be given to a contractor like McDougall with instructions to "make sure your people get this and give me a sign-off sheet making sure people get this information." (*Id.*) He believed that "Nyrstar would have probably given this [the Roaster Shut Induction] to contractors." (*Id.*) Cook's testimony does not establish whether the document actually was given to McDougall or to its employees or subcontractors. Nyrstar also cites Skelton's deposition, but the cited testimony does not support an inference that the Roaster Shut Induction or any similar document was given to McDougall. Rather, Skelton's testimony refers to the list of PPE given to McDougall (which apparently did not include respirators) and the orientation video showed at the Nyrstar "guard shack" to any workers coming onto Nyrstar worksite. (Skelton Dep. 21–23, 41.)

Wesley Albright, an ICI crane operator, testified that he did not recall receiving any special training or information from ICI before going to work at Nyrstar facility, but he watched an orientation video at the guard shack and signed the sign-in sheet. (Albright Dep. 21.) He denied

ever seeing the Roaster Shut Induction document, but he acknowledged that McDougall conducted a regular “safety meeting” every day. (*Id.* at 22–23; *see also* Skelton Dep. 48.) As noted above, however, Albright testified that he did not learn about possible sulfur dioxide exposure onsite until he had been at the Nyrstar facility a few days and another McDougall employee told him that the “smoke blowing across [his] crane could be SO₂ gas.” (*Id.* at 23.) Haynes, another ICI employee, similarly testified that he and Baker did not receive any training at the Nyrstar facility other than watching the orientation video. (Doc. No. 51-19, Haynes Dep. 25–26.) The orientation video did not include information about sulfur dioxide. (Cook 2023 Dep. 221; Haynes Dep. 66.)

Jorge Bravo was McDougall’s safety director in 2019, during the Nyrstar roaster rebuild project. (Bravo Dep. 25.) Daron Smith, an Outotec employee, was on the Nyrstar project team as “safety coordinator.” (Doc. No. 51-9, Santaluce Dep. 15–16.) Daron Smith’s first day on the site was August 6, 2019, two days before the subject incident. (*Id.* at 86.) Prior to Smith’s arrival, according to Santaluce, Cook and two other Nyrstar employees were involved in the project as safety managers. (*Id.* at 87; *see id.* at 123 (identifying Kevin Cook as the “shut safety manager” on the project). Smith’s role was safety coordinator “for the roaster demo and rebuild portion,” which was scheduled to begin on September 2, 2019, so his “main activity from when he arrived on-site to September 2nd is really focusing on getting ready for the . . . shutdown.” (*Id.* at 125.)

Pursuant to the Nyrstar-McDougall July 2019 Framework Agreement, McDougall was to provide day and night shift personnel, including foremen, journeymen, mechanics, painters, laborers, and drivers for purposes of performing the work, and ensure that its employees, contractors, and subcontractors completed the “OSHA mandated 8-hour training prior to performing services at this location.” (Doc. No. 50-1, at 16, 19.) The Agreement also provided that “[s]afety in the workplace, in particular, is a priority for Nyrstar” and required that McDougall, as

supplier, deliver its services in full satisfaction of applicable safety and health rules. (*Id.* at 12.) It also required McDougall to comply with Nyrstar's Policies and Procedures (*id.*), including the Safety and Health Statement referenced in Annexure 5 to the Framework Agreement. (*Id.* at 12, 23.)

The earlier Nyrstar-McDougall May 2019 Supply Agreement further stated that McDougall was to "provide all necessary craft labor, supervision, project coordination, quality control, safety supervision, contract management, and other labor required to successfully complete the scope" of the project. (Doc. No. 47-3, at 43.) According to Bravo, "McDougall supervised its own employees in the fabrication area" (Bravo Dep. 193:4-5.) It also acted as the direct supervisor to its subcontractors on the project, including the ICI employees. (Doc. No. 51-14, Sims Dep. 93, 113; Skelton Dep. 64, 79.)

Cook conceded during his deposition that "numerous regulations govern the Nyrstar facility as it relates to SO₂," and he further stated that "[s]afety is a shared responsibility on the site. . . . Nyrstar has a responsibility at the site for safety, and [it] required that [its] contractors [and its employees] share that responsibility." (Cook 2023 Dep. 56–57.) He stated that "at no point was a respirator required safety equipment for the McDougall fabrication area." (*Id.* at 225.) It seems that the only training Nyrstar provided to individual contractor and subcontractor employees was the orientation video, which did not mention sulfur dioxide. (Cook 2023 Dep. 221; Haynes Dep. 66.) According to Bravo, Nyrstar always had control over the entire facility, although McDougall "followed [Nyrstar's] rules." (Bravo Dep. 272.) Ultimately, no one came onto the Nyrstar facility without going through the guard shack and watching the orientation video. (Cook 2023 Dep. 347.)

Cook states in his Affidavit that McDougall kept a Contractor Induction & Training Verification Log, indicating whether its employees and subcontractors “received all necessary training,” and that this log, which it sent back to Nyrstar, shows that all ICI employees, including Baker, received the “requisite safety training.” (Doc. No. 46, Cook Aff. ¶¶ 17–18; *see also* Baker Doc. No. 47-7, at 29.) Although Cook’s testimony on this topic is confusing, it does not appear that there is any record that Baker received the Roaster Shut Induction training. (Cook 2023 Dep. 341–36.) Baker specifically denied receiving any “site specific” training or orientation prior to entering Nyrstar’s facility and denied ever receiving any training on sulfur dioxide prior to entering the Nyrstar facility. (Baker Jan. 2023 Dep. 24.) Regardless, Cook testified that he did not believe the Roaster Shut Induction training contained information on “what to look for for SO₂ gas” either. (*Id.* at 346.) In any event, it seems clear that the training and safety material Nyrstar provided to McDougall did not cover sulfur dioxide risk or exposure, and neither McDougall nor ICI provided employees performing work on the Nyrstar roaster project any site-specific training on sulfur dioxide.

Nyrstar nonetheless contends that it disseminated safety guidelines to various contractors working on the project, including McDougall, who were then supposed to ensure that their employees and subcontractors reviewed and followed such guidelines. It expected McDougall and its employees and subcontractors (including ICI employees) to comply with Nyrstar’s relevant and applicable safety policies and procedures, and both McDougall and Outotec had designated individuals responsible for overseeing safety. (*See* Doc. No. 72, Nyrstar Resp. to Pl’s Statement of Additional Facts ¶ 72.)

D. Outotec’s Role

Nyrstar asserts that, under the Outotec Management Agreement, Outotec was contractually obligated to provide a Safety Officer to “[o]rganize and facilitate risk analysis sessions (with

Nyrstar and Nyrstar’s suppliers),” “[d]evelop review and approve safety plans,” “[d]o in the field safety supervision,” “[h]elp generate and facilitate discovery of workable solutions as needed . . . to maintain safety performance expectations,” and provide a “[d]aily report per safety shutdown management plan.” (Nyrstar SUMF ¶ 23 (quoting Outotek Management Agreement, Doc. No. 51-7, at 15).) It asserts that Outotec further agreed to provide “[s]afety management,” including “review[ing] and liais[ing] with contractors on risk assessments and safety plans” and “[c]oordinat[ing] and supervis[ing] safety requirements and safety performance of all personnel working in the roaster area during implementation.” (*Id.*)

As Outotec points out, however, Annexure 1 of the Outotek Management Agreement actually states that Outotec, as “Supplier,” agreed very generally to “provide all services and expertise in project planning” and management, including “management of Nyrstar’s service providers,” to “ensure cost effective and timely completion, tracking, managing, and reporting project costs and completion, and other construction management service” in connection with the “demoli[tion of] the existing roaster and construct[ion of] the replacement safely, on schedule, within budget and meeting all quality requirements.” (Doc. No. 51-7. at 14.) The Annexure then lists “[t]he types of activities required to achieve this [that] have been contemplated” by Nyrstar and provides “[a]s an example, the types of tasks to be completed by the Supplier” as “defined by role” and outlined in the Annexure. The document specifically notes that “[t]hese requirements are included as an example and actual requirements may be modified” at any time by Nyrstar. (*Id.*) Below that disclaimer, various expected roles and their associated responsibilities are listed, including the role of Senior Construction Manager and “Safety Officer.” (*Id.* at 15.)

In other words, according to Outotec, it was not contractually bound to provide the specific services identified in Annexure 1. (Doc. No. 58, at 5, 7; *see also* Santaluce Dep. at 83 (“So those

responsibilities set out in the contract, those are modifiable . . . by Nyrstar [who] could expand or take away responsibilities [T]hey could dictate to us or instruct us to take on activities or not.”); *id.* at 124 (confirming that the organization chart for the shut safety management plan identified Kevin Cook as the shut safety manager); *id.* at 124–25 (noting that Daron Smith came on board as the shut safety coordinator on August 6, 2019, but his role was to focus on coordinating safety for the shutdown beginning on September 2, 2019); Cook 2023 Dep. at 198–99 (agreeing that the “list of roles . . . included examples of what each role was meant to do” but that the individuals in those roles “wouldn’t be doing each of those tasks at all times at every phase of the project”; instead, their tasks “would be [partially] dependent upon what Nyrstar needed” at a particular point).)

Nyrstar counters that Annexure 1 does not merely identify the roles that Outotec can or may fill but instead specifically required Outotec to provide personnel to the project, including a Safety Manager. (*See* Doc. No. 51-7, at 14.) It also specifically required Outotec to supply “services and expertise in project planning, schedule optimization, [and] management of Nyrstar’s service providers to ensure cost effective and timely completion . . . and other construction management services to demolish the existing roaster and construct the replacement *safely*” (*Id.*) Nyrstar argues that, while the requirements in the contract *could* be modified from time to time, Outotec has not actually shown that they *were* modified or that it was ever released from an obligation to provide such services. (Doc. No. 66, at 2-3.)

Regardless of what the Outotec Management Agreement says, Cook testified that all of the Outotec personnel on the site were “reportable” to Nyrstar; Nyrstar “had the ability to determine who from Outotec was onsite” and what they did, and Outotec “couldn’t unilaterally make decisions about policies and procedures at the Nyrstar facility.” (Cook 2023 Dep. 193.) Cook stated

that both Nyrstar and Outotec were responsible for “verif[ying]” that contractors were “complying with the safety management program.” (*Id.* at 84–85.) More specifically, he claimed that they “shared responsibility” for safety. (*Id.* at 207.) However, he also acknowledged that Nyrstar was the entity that provided warnings about sulfur dioxide to its contractors and that it expected the contractors to “trickle down that information to their employers and subcontractors.” (Cook 2023 Dep. 281.) Because Baker was an ICI employee, subcontracted by McDougall, he had no contact with Outotec.

E. McDougall’s Role

According to Nyrstar, “[i]n contracting with McDougall to fabricate and assemble the new roaster onsite, Nyrstar relinquished control of certain areas of its facility to McDougall, which were generally referred to as the fabrication area.” (Cook Aff. ¶ 20.) McDougall was purportedly “responsible for overseeing all work in the fabrication area, and Nyrstar’s involvement in the work performed in such area was minimal.” (*Id.*)

Cook testified that the PPE required in the fabrication area included such things as “hard hat, safety glasses, side shields, long sleeves, high-visibility material on your upper body somewhere, gloves, long pants, and safety-toed boots with metatarsal protection,” but respirators were not required.¹³ (Cook 2021 Dep. 132.) In response to the question of whether there was a concern about sulfur dioxide exposure in the fabrication area, Cook responded that Nyrstar, McDougall, and Outotec were involved in performing a “risk assessment for working in the fabrication area,” and sulfur dioxide exposure was identified as a risk—specifically because the entire reason McDougall was onsite building a new roaster dome was because the old roaster was

¹³ Cook noted that, while the respirators might provide some protection from sulfur dioxide, Nyrstar was primarily concerned about protection from cadmium and lead. (Cook 2021 Dep. 136–37.)

leaking sulfur dioxide gas. (*Id.* at 132–33.) As a result of their knowledge of the risk, Nyrstar and McDougall “identified controls that needed to be implemented,” and McDougall was responsible for implementing those controls within the fabrication area. (*Id.* at 133–34.)

Jorge Bravo, in fact, testified that he participated in “at least two” risk assessments associated with the Nyrstar project, one for when they were constructing the roaster shell, and one for when they were moving it into place. (Bravo Dep. 98–99.) The assessment team members for the second assessment, around July 3, 2019, included individuals from Nyrstar (Kevin Cook, Rick Gordon, and Gerrit-jan Hendricks) and McDougall (Bravo and John Gentry), as well as two others he did not know but later learned (during his deposition) were from Outotec, who did not speak during the meetings. (*Id.* at 99–100, 184.) The other attendees generally discussed the risk of sulfur dioxide exposure and how to mitigate it, how weather and temperature played a role, and the need for a “rally point” in the event workers needed to leave the fabrication area. (*Id.* at 102–04.) Bravo stated that the risk assessment was provided to McDougall after the meeting and then “posted” to make it available to McDougall workers. (*Id.* at 103–04.) In addition, it was decided that McDougall would place one sulfur dioxide monitor within the fabrication area and one in the rally area.

McDougall hung the two sulfur dioxide monitors—initially borrowing them from Nyrstar and then purchasing its own. The monitors were set for a “low alert” at 5 parts per million and a “high alert” set at 10 parts per million. Employees were notified that they should move to the rally point if the low alarm sounded three times within one hour. (*Id.* at 107–08.) The monitors were still in place in August 2019. (*Id.* at 109.) The members of the risk assessment team all agreed on the placement of the monitors. (*Id.* at 205–06.) McDougall employee John Gentry was responsible for ensuring the monitors were charged each evening and also for filling out safety permits and

other on-site documentation. (*Id.* at 206.)

According to the plaintiff, the plan to install sulfur dioxide monitors “failed to meet adequate protection levels,” because the sulfur dioxide monitors that Nyrstar and McDougall used were “personal monitors . . . not intended to replace a network of area monitors.” (Zimmerman Report 7; *see also* Doc. No. 51-29, Zimmerman Dep. 26.) Moreover, the monitors’ “low alarm” setting was woefully out of date, and the monitors were not set up in the area where the plaintiff claims to have been exposed to sulfur dioxide. (*See* Zimmerman Report 12 (noting that Nyrstar was apparently unaware of “other more up-to-date and more protective [Occupational Exposure Levels]”); Zimmerman Dep. 96 (“Mr. Baker unfortunately was not equipped with a monitor, and . . . where he was exposed was not where the alarm was.”).) It nonetheless appears that McDougall’s placement of the monitors was consistent with the safety plan devised during the risk assessment meetings.

F. Risk from Sulfur Dioxide Exposure

According to Neil Zimmerman, the plaintiff’s expert Certified Industrial Hygienist,

SO₂ is a by-product of smelting as well as of other processes. It has a pungent “just struck match” odor, causes irritation of the eyes, nose, throat and upper respiratory tract, coughing, nasal discharge and bleeding, and at higher levels, irreversible respiratory system damage.

According to the ACGIH Documentation of the TLV summary, “SO₂ is readily absorbed by the mucous membranes of the nose and respiratory tract and causes irritation of the mucous membranes, which probably results from the action of sulfurous acid formed when the highly soluble gas dissolves.”

(Zimmerman Report 4.)

Zimmerman states that, because Nyrstar was not monitoring or recording sulfur dioxide air concentration values in the areas where Baker was working on August 8, 2019, it is only possible to estimate Baker’s exposure level based on Zimmerman’s “knowledge of the exposure guidelines for SO₂, historical information, and scientific literature.” (*Id.*) His opinion is that Nyrstar’s

precautions relating to sulfur dioxide were wholly ineffectual, that Nyrstar underestimated the risk posed by potential sulfur dioxide exposure, and that, despite actual knowledge of the sulfur dioxide leak for over two years, “Nyrstar did not adequately notify and educate all parties of the presence of and the hazards of SO₂.” (*Id.* at 10, 11.)

IV. ANALYSIS

As set forth above, both Nyrstar and Outotec argue that the plaintiff’s negligence claims against them fail because he cannot establish causation. In addition, Nyrstar asserts that, to the extent there was any negligence, it was on the part of ICI, McDougall, or Outotec, not Nyrstar, while Outotec argues that it is entitled to summary judgment because it owed no duty to the plaintiff.

A. The Plaintiff’s Ability to Prove Causation

1. Negligence Standards

To prove negligence, basically defined as the failure to exercise reasonable care, a plaintiff must establish: “(1) a duty of care owed by defendant to plaintiff; (2) conduct below the applicable standard of care that amounts to a breach of that duty; (3) an injury or loss; (4) cause in fact; and (5) proximate, or legal, cause.” *Giggers v. Memphis Hous. Auth.*, 277 S.W.3d 359, 364 (Tenn. 2009) (quoting *McCall v. Wilder*, 913 S.W.2d 150, 153 (Tenn. 1995)).

Tennessee courts recognize that cause in fact and proximate cause are “distinct elements of negligence, and both must be proven by the plaintiff by a preponderance of the evidence.” *Hale v. Ostrow*, 166 S.W.3d 713, 718 (Tenn. 2005). Both are “ordinarily jury questions, unless the uncontroverted facts and inferences to be drawn from them make it so clear that all reasonable persons must agree on the proper outcome.” *Id.* (citation omitted).

Cause in fact means that the defendant’s conduct “directly contributed to the plaintiff’s injury,” such that the plaintiff’s injury would not have occurred “but for” defendant’s act. *Id.* Cause

in fact does not mean that the defendant's conduct was the *sole* cause, but it must have been a cause. *Id.* Conversely, proximate cause “puts a limit on the causal chain, such that, even though the plaintiff's injury would not have happened but for the defendant's breach, defendants will not be held liable for injuries that were not substantially caused by their conduct or were not reasonably foreseeable results of their conduct.” *Id.* at 719. “Thus, proximate cause, or legal cause, concerns a determination of whether legal liability should be imposed where cause in fact has been established.” *Id.* at 719 (citation omitted).

In toxic tort cases, the general causation standard has been somewhat modified. In this context, a plaintiff must show “both general and specific causation.” *Dowdy v. BNSF Rwy. Co.*, No. W2021-01003-COA-R3-CV, 2023 WL 3000863, at *2 (Ten. Ct. App. Apr. 19, 2023) (citing *Pluck v. B.P. Oil Pipeline Co.*, 640 F.3d 671, 676-77 (6th Cir. 2011)). In other words, the plaintiff must offer proof that “the toxic substance is capable of causing, and did cause, the plaintiff's alleged injury.” *Pluck*, 640 F.3d at 676–77.

2. *Baker's Exposure to Sulfur Dioxide*

Nyrstar asserts that Baker has failed to establish that he was “even possibly exposed to SO₂ in an injurious quantity or that his alleged exposure cause his claimed injuries,” pointing to the report of Gale Hoffnagle, its expert meteorologist, who, according to Nyrstar, calculated “to a reasonable degree of scientific certainty that[,] even with all unknown factors like windspeed, wind direction, and amount of SO₂ emissions weighted entirely in [Baker's] favor,” Baker's maximum possible exposure to sulfur dioxide from either the tailgas stack or the roaster itself was effectively zero, or in any event so low that it would not have caused reactive symptoms in even the most sensitive individual. (Doc. No. 49, at 13–14 (citing Doc. No. 47-13, Hoffnagle Report 7–8).) Nyrstar claims that Hoffnagle's “unrebutted expert testimony (establishing that Plaintiff's claims are physically impossible) compels summary judgment in Nyrstar's favor.” (Doc. No. 49, at 14.)

As the plaintiff points out, Hoffnagle’s opinion is essentially that there would *never* be a risk of exposure to sulfur dioxide on Nyrstar’s grounds (outside the roaster itself) at a level sufficient to be detectable, much less exposure at a level sufficient to cause an adverse reaction. His opinion in that regard, however, is refuted by the risk assessment performed by Nyrstar, which recognized the risk of sulfur dioxide exposure at its facility (*see* Cook 2021 Dep. 49–50, 132–33), as well as by evidence that other workers onsite had also smelled sulfur dioxide and experienced effects from sulfur dioxide exposure. (*See* Zimmerman Report 10–11 (summarizing other reports of exposure).) Moreover, Cook himself acknowledged that there was a potential for a leak between the roaster and the tailgas stack (Cook 2023 Dep. 334–36), a possibility Hoffnagle apparently did not consider. Cook also conceded that Nyrstar was “not monitoring the [sulfur dioxide] levels around the roaster . . . during the leak.” (Cook 2021 Dep. 42.)

As Zimmerman noted, by the time of Baker’s presence at Nyrstar in August 2019, the sulfur dioxide leak at Nyrstar’s roaster operation “had been continuous and getting worse for approximately 28 months.” (Zimmerman Report 1.) However, it was impossible to estimate the precise dosage of sulfur dioxide to which Baker was exposed using quantitative data, because Baker was not wearing a personal sulfur dioxide monitor, and “[b]ecause there were no SO₂ air concentration values being collected, monitored or recorded in the areas where Mr. Baker was working while on site for the crane lift on August 8, 2019, and especially at the point where he exited his cab in the late afternoon as he was arranging to leave the site.” (*Id.* at 4, 5.) Outotec’s industrial hygiene expert, Michael McCoy, agreed that it was “impossible to reconstruct or estimate the airborne concentration of SO₂ gas at the time at which Mr. Baker was allegedly exposed,” largely because “no data were collected regarding the amount of SO₂ in the atmosphere at the facility during any phase of the project.” (Doc. No. 61-3, McCoy Disclosure 28.)

Zimmerman further opined:

What is most important to emphasize is that any debate about: 1) the exact location of where [Baker] got out of his cab, 2) the exact distance from the roaster, 3) the exact amount of time he was out of his cab, or 4) the exact concentration of SO₂ present where and when he got out of the cab is all inconsequential and should not play an important part of the discussion about the fact that he was definitely, clearly and without any question whatsoever exposed to excess SO₂. The fact remains that he was exposed to SO₂ to the extent that he had immediate reactions of taste, smell, irritation and cough, difficulty breathing, bleeding from the nose and mouth within hours of exposure and long-term respiratory system damage, all consistent with an excess exposure to SO₂.

(Zimmerman Report 6.)¹⁴

The court finds that Zimmerman’s opinions, together with the other evidence on which he relied, as referenced above, are sufficient to call into question the validity of Hoffnagle’s opinion that it was impossible for the plaintiff to have been exposed to a sufficient quantity of sulfur dioxide on August 8, 2019 to cause adverse symptoms. There is clearly a material factual dispute as to whether the plaintiff was exposed to sulfur dioxide that day in a sufficient dose to cause his alleged symptoms.¹⁵

¹⁴ The fact that the plaintiff smelled the distinctive odor of sulfur dioxide and then immediately began experiencing symptoms differentiates this case from typical “toxic tort” cases, in which plaintiffs are often (allegedly) exposed to some toxic substance over the course of many years before developing symptoms or a condition that might or might not be causally connected to the environmental exposure. *See, e.g., Pluck*, 640 F.3d at 674 (where the plaintiff filed suit in 2008, alleging that exposure to benzene from a contaminated well beginning in 1996 caused her to develop lymphoma in 2002 and 2007).

¹⁵ Nyrstar’s reliance on *In re Tennessee Valley Authority Ash Spill Litigation*, 805 F. Supp. 2d 468 (E.D. Tenn. 2011), as “instructive” (Doc. No. 49, at 14) is misplaced. There, the court noted that a plaintiff seeking to prove a “fear of injury” from exposure to a toxic substance had to prove “actual—not potential—exposure.” *Id.* at 480. The plaintiffs there alleged that they had been exposed to coal ash, but they failed to show that “exposure to the coal or fly ash in the environment equates to an exposure to the potentially toxic constituents bound up in the ash.” *Id.* at 482.

3. *The Plaintiff's Alleged Injuries from Sulfur Dioxide Exposure*

Next, Nyrstar argues that it is entitled to summary judgment, because it “cannot be the but for cause of, or substantial factor in, creating medical conditions that (i) Plaintiff’s own physicians do not believe Plaintiff has and (ii) Plaintiff already had before working at Nyrstar on August 8, 2019.” (Doc. No. 49, at 17.) Again, the court finds that material factual disputes preclude summary judgment.

First, while the injuries as alleged in the FAC are “blistering to [Baker’s] lungs and larynx” and “severe, persistent airway disease” resulting from sulfur dioxide exposure (FAC ¶¶ 30, 31), these descriptions are apparently the plaintiff’s subjective understanding of the effect of his initial exposure—based on his recollection of coughing up blood and seeing blood dripping from his nose within a few hours of his initial exposure (Baker Jan. 2023 Dep. 94)—and the fact that he has continued to cough since then. When Baker’s treating specialist, Dr. Carla Sevin, was asked whether, if someone was claiming to be “coughing up blood,” she would have expected his bronchoscopy to show more damage than was evident on Baker’s bronchoscopy, Sevin responded, “not necessarily,” since the bronchoscopy took place six weeks after the “acute injury.” (Sevin Dep. 53.) In other words, the fact that no expert can attest to the plaintiff’s coughing up blood does not mean that he himself would not be able to offer testimony to that effect, and the question of whether there were actually “blisters” is beside the point.

Regarding the plaintiff’s description of “severe, persistent airway disease,” Dr. Sevin has diagnosed the plaintiff with irritable larynx syndrome (“ILS”), one symptom of which is a chronic cough.¹⁶ (Sevin Dep. 83, 97, 156.) She assesses the ILS as “permanent,” and she attributes the

¹⁶ She also notes that the larynx, which contains the vocal cords, forms part of the “upper airways” in the respiratory system. (Sevin Dep. 59.)

condition to chemical exposure, specifically to sulfur dioxide. (*Id.* at 156–57, 178–80.) In other words, the plaintiff has presented evidence of a medical condition caused by acute exposure to sulfur dioxide.

As for Nyrstar’s assertion that the plaintiff’s ILS with chronic cough predated August 8, 2019, Dr. Sevin explained why that simply was not the case. Baker was diagnosed with a postviral cough in 2014 that resolved after approximately eight weeks, and nothing in his medical record suggests that he suffered from a chronic cough (or any cough) after that time up until August 8, 2019. While Sevin agreed that Baker has a longstanding GERD diagnosis and that GERD can exacerbate ILS symptoms, she also explained why she did not believe that his current condition was caused by GERD:

[GERD] can be a trigger [for irritable larynx]. It can be an exacerbator. [But] GERD is very common. And so we see a lot of patients who have chronic cough because they have GERD. We treat the GERD, and the cough resolves. They don’t have permanent excitability of the larynx.

(Sevin Dep. 65; *see also id.* at 107 (“Generally, when you treat [GERD], it gets better, so it doesn’t cause this severe laryngeal hypersensitivity that we see in these kinds of exposures because it’s sort of a chronic kind of low-level irritant.”).)

The other medical records to which Nyrstar points in an attempt to show that the plaintiff did not suffer an “acute” injury on August 8, 2019 do not obviate the fact that he began coughing after smelling something sulfurous at Nyrstar’s facility on August 8, 2019 and essentially has not stopped since. The defendant remains free to cross-examine Dr. Sevin about her conclusions and to present its own contradictory evidence, but Nyrstar has not demonstrated an absence of evidence to support the plaintiff’s claim that his exposure to sulfur dioxide caused him to develop ILS and a chronic cough.

4. *Dr. Sevin's Differential Diagnosis*

Outotec further argues that the plaintiff's claim fails because Dr. Sevin did not perform an appropriate differential diagnosis before concluding that sulfur dioxide exposure was the cause of Baker's ILS. In making this argument, Outotec acknowledges that, in the context of a toxic tort case, there are two "appropriate method[s] for making a determination of causation for an individual disease": dose and differential diagnosis. *Pluck*, 640 F.3d at 678. Here, everyone agrees that it is impossible to establish dose in this case, because Nyrstar was not actually monitoring the sulfur dioxide leak in the area where the plaintiff claims to have inhaled sulfur dioxide. Accordingly, the plaintiff relies on Dr. Sevin's differential diagnosis to establish specific causation. As Outotec recognizes, differential diagnosis is "a standard scientific technique of identifying the cause of a medical problem by eliminating the likely causes until the most probable one is isolated." (Doc. No. 52, at 21 (quoting *Pluck*, 640 F.3d at 678).) "A physician who applies differential diagnosis to determine causation 'considers all relevant causes of the symptoms and then eliminates alternative causes based on a physical examination, clinical tests, and a thorough case history.'" *Pluck*, 640 F.3d at 678 (quoting *Best v. Lowe's Home Ctrs., Inc.*, 563 F.3d 171, 178 (6th Cir. 2009)).

Dr. Sevin did that in this case, as she explained during her deposition. Presented with other potential alternative causes (including Reactive Airways Dysfunction Syndrome, GERD, asthma, bronchitis, pneumonia, asbestos exposure, laryngopharyngeal reflux, restrictive lung disease, seizure, and cardiac problems), Dr. Sevin explained why she concluded that none of these was causally related to the plaintiff's condition. (Sevin Dep. 54–55, 89–90, 93–94, 101–04, 127–28, 133–36, 153–56.) Outotec does not dispute Sevin's differentiation of these other potential causes; it argues only that she testified that Baker's injuries were "consistent with inhalation of '[a]nother highly irritant water soluble chemical'" and that the causal irritant did not "necessarily have to be

sulfur dioxide,” but she “failed to show how she eliminated other highly irritable, water-soluble chemicals via anything other than the testimony from Plaintiff.” (Doc. No. 52, at 22.) As a result, Outotec claims, Dr. Sevin “failed to conduct a complete differential diagnosis to determine that it was sulfur dioxide alone that caused Plaintiff’s injuries.” (*Id.*)

This argument borders on the ludicrous. Dr. Sevin, on questioning, agreed that the plaintiff’s injury could be consistent with exposure to some other “highly irritant water soluble chemical,” but she also noted that the “description [Baker] gave of how it smelled was very typical for sulfur dioxide.” (Sevin Dep. 105.) When asked if, hypothetically, Baker was not actually exposed to sulfur dioxide on August 8, 2019, could she think of anything else that might cause his symptoms, she answered: “I cannot. Perhaps some other chemical exposure, like we’ve theorized. But I cannot conjure up another chemical exposure that would fit the odor and irritant description he gave on initial presentation.” (*Id.* at 180.) There is no evidence in the record that Baker was or could have been exposed to any other noxious chemical on August 8, 2019 while on Nyrstar’s premises, and consideration of other chemicals as the cause would have been purely speculative on Dr. Sevin’s part. Moreover, as set forth above, a physician applying a differential diagnosis is required only to consider “all *relevant* potential causes” of the plaintiff’s symptoms, *Best*, 563 F.3d at 178 (emphasis added), not every *possible* potential cause. Outotec itself does not even suggest another chemical irritant that Dr. Sevin should (or could) have but failed to consider.

Again, Outotec remains free to cross-examine Dr. Sevin on this question, but it has not shown that Dr. Sevin failed to adequately conduct a differential diagnosis, nor does it actually challenge the admissibility or reliability of her diagnosis. *See Pluck*, 640 F3d at 678 (addressing on appeal the trial court’s exclusion of the plaintiff’s proposed specific-causation opinion as

unreliable). Whether the plaintiff's ILS was caused by exposure to sulfur dioxide at Nyrstar's facility on August 8, 2019 remains a jury question.

B. Nyrstar's Potential Liability

Nyrstar next argues that, assuming that the plaintiff can show that he suffered an injury caused by exposure to sulfur dioxide at Nyrstar's facility on August 8, 2019, he cannot show that the fault lies with Nyrstar. It argues that all possible fault lies with McDougall, ICI, and/or Outotec, because Nyrstar "turned over control of the area where Plaintiff was working" to the other entities, and they were the entities responsible for "ensuring Plaintiff performed his work safely." (Doc. No. 49, at 22–23.) It contends that it provided McDougall "everything it needed in order to properly educate, supervise, and monitor its employees and subcontractors," that McDougall was aware of the sulfur dioxide leak, and that McDougall was responsible for communicating the hazard and providing or confirming adequate training and supervision of its employees and subcontractors to mitigate any risk of harm. (*Id.* at 23.) It also asserts that, by contract, McDougall was responsible for supervising, monitoring, and training any subcontractors it brought in to perform work on the Nyrstar roaster. It then contends that, to the extent any liability extends beyond McDougall (and ICI), then it stops with Outotec, as "the entity that oversaw the entire project" and the entity that specifically contracted with Nyrstar to provide "safety management" as part of that job. (*Id.* at 25.) In other words, Nyrstar is apparently arguing that it had no duty to protect the plaintiff, because it contractually delegated all responsibility for worker safety in connection with the roaster rebuild project to McDougall, ICI, and/or Outotec.

Viewed in the light most favorable to the plaintiff and Outotec as the non-moving parties with respect to Nyrstar's Motion for Summary Judgment, material factual disputes preclude judgment in favor of Nyrstar on this issue. Kevin Cook, Nyrstar's "safety, health, environment, and quality [SHEQ] manager" (Cook 2021 Dep. 10), testifying as Nyrstar's corporate

representative, confirmed that all of the Outotec personnel on the site ultimately report to Nyrstar and could not “unilaterally make decisions about policies and procedures at the Nyrstar facility.” (Cook 2023 Dep. 193.) He also agreed that both Nyrstar and Outotec were responsible for “verif[ying]” that contractors were “complying with the safety management program.” (*Id.* at 84–85.) More to the point, he agreed that safety on the roaster project was a “shared responsibility.” (*Id.* at 207.) It is clear that there was a safety team, comprised of individuals from Nyrstar, Outotec, and McDougall, and Cook was personally engaged in the risk assessment process and the drafting of the safety plans that resulted from that process.

With regard to the development of the safety plans (including the various iterations of the Shut Safety Induction), there is also evidence supporting an inference that Nyrstar minimized the risk posed by the sulfur dioxide leak(s) and failed to adequately communicate that risk or to incorporate mitigation methods in the safety plans that would actually address the risk. Specifically, Zimmerman opines that Baker’s risk of mitigation would have been minimized if he had been wearing a personal sulfur dioxide monitor, knew what to do if it alerted, and had an effective respirator available to wear if it did alert. (Zimmerman Report 7–8.) Cook admitted that no one outside the immediate area of the roaster was required to wear a respirator (Cook 2023 Dep. 225), even though the Shut Induction Plan apparently called for chemical cartridge respirators for anyone in the “set-up/pre-demo area.” (Zimmerman Report 7.) It is clear that Nyrstar is at least partially responsible for any confusion regarding whether respirators were required, as well as for the decision regarding how many personal sulfur dioxide monitors to post and where. McDougall’s Safety Director, Jorge Bravo, stated that the primary participants in the safety meeting were Nyrstar’s and McDougall’s representatives, while Outotec’s representatives did not “have verbal input.” (Bravo Dep. 184.) Although sulfur dioxide was discussed as a risk, no one explained why

it was a risk. In addition, although “roaster emissions” were mentioned, Bravo, at least, did not interpret that to mean that the roaster was leaking sulfur dioxide gas. (Bravo Dep. 102–03.) He also stated that McDougall relied on Nyrstar to “inform us if there was hazards that we needed to know about.” (Bravo Dep. 29.)

In other words, it is undisputed that Nyrstar was involved in the development of the safety plans and the communication of the risk posed by exposure to sulfur dioxide gas at its premises, and there is at least a question of fact as to whether its communications or the safety plan as developed were adequate. Even if Nyrstar delegated responsibility for safety to its contractors, those entities relied on the information Nyrstar gave them. Nyrstar’s efforts to disclaim any participation in, or responsibility for, the development and implementation of the safety plans associated with the roaster rebuild, and specifically with respect to risk of sulfur dioxide exposure and mitigation of the risk posed by the sulfur dioxide leak, is unconvincing, to say the least.

Nyrstar is not entitled to summary judgment on the question of its potential liability for negligence.

C. Outotec’s Potential Liability

Outotec, like Nyrstar, argues that, even if the plaintiff proves that he was injured by sulfur dioxide exposure, it cannot be liable for his damages. Its argument ultimately boils down to an assertion that, because it did not create the hazard (Nyrstar did), it had no duty to protect the plaintiff from it, because it had no special relationship with the plaintiff—it did not hire him, train, or supervise him and had no responsibility to do so, and Nyrstar admits as much. (*See Cook 2023 Dep. 280–81, 325–26* (confirming that Nyrstar did not expect Outotec to provide PPE to Baker or to train him or warn him about sulfur dioxide).)

Nyrstar did not file a response to Outotec’s Motion for Summary Judgment, but it filed a Response to Outotec’s Statement of Additional Material Facts (Doc. No. 71) and a Reply to

Outotec's Response to Nyrstar's Motion for Summary Judgment, in which Nyrstar argues that, pursuant to the contractual relationship between Outotec and Nyrstar, Outotec took on the responsibility for overseeing safety during the roaster construction project. (Doc. No. 66, at 3–4.) It maintains that it “turned over the fabrication area of the facility to . . . Outotec and McDougall,” and that, because the plaintiff's injury took place within that area, those entities must be responsible. (*Id.* at 4.) Baker's argument in opposition to Outotec's motion mirror's Nyrstar's, insofar as it is based solely upon Nyrstar's identifying Outotec as a comparative tortfeasor and Nyrstar's assertion that “it hired Outotec to take on a portion of its responsibilities during the roaster rebuild project.” (Doc. No. 63, at 9.) Baker insists that Outotec's argument about duty “carefully avoids a discussion of the duties owed by Nyrstar and glaringly ignores the fact that Nyrstar has blamed Outotec.” (*Id.*) In other words, the plaintiff's argument is premised entirely upon the existence of a contract between Nyrstar and Outotec and the fact that Nyrstar points its finger at Outotec. His position seems to be that Nyrstar owed him a duty of reasonable care, but if Nyrstar delegated some part of its responsibilities to Outotec, then Outotec must owe him a duty of care too. Neither Nyrstar nor the plaintiff attempts to point to any specific contractual obligation pursuant to which Outotec took on a duty to train or warn the plaintiff about sulfur dioxide or to provide PPE to protect him from it. Instead they argue only that Outotec agreed very generally to provide safety management for the roaster construction project.

“Duty is a legal obligation to conform to a reasonable person standard of care in order to protect others against unreasonable risks of harm.” *Satterfield v. Breeding Insulation Co.*, 266 S.W.3d 347, 355 (Tenn. 2008). The general law in Tennessee regarding duty—the first element of a *prima facie* negligence claim—is that “persons do not ordinarily have a duty to act to protect others from dangers or risks except for those that they themselves have created.” *Id.* at 357.

Exceptions to that general rule arise, however, when there is a special relationship “between the defendant and either the person who is the source of the danger or the person who is foreseeably at risk from the danger.” *Id.* at 359. Such a relationship may “create an affirmative duty either to control the person who is the source of the danger or to protect the person who is endangered.” *Id.* at 360 (citing Restatement (Second) of Torts §§ 314A, B; 315).¹⁷

Thus, for example, in *Grogan v. Ugгла*, 535 S.W.3d 864, 866 (Tenn. 2017), the question was “whether a home inspector is subject to liability for the physical harm suffered by a social guest of the home inspector’s client.” The plaintiff in that case was injured falling from a second-story deck when the deck railing gave way. The deck was improperly constructed by a different defendant and then negligently inspected by the defendant home inspector—who failed to notice problems with the deck railing. The plaintiff there argued that the case was governed by *Satterfield*, since he was a person foreseeably injured as a result of the home inspector’s negligence. The Tennessee Supreme Court disagreed, noting that *Satterfield* had quoted with approval the principal articulated in the Restatement (Third) of Torts, to the effect that, when an actor and a victim are

complete strangers and have no relationship, the basis for the ordinary duty of reasonable care . . . is *conduct* that creates a risk to another. Thus, a relationship ordinarily is not what defines the line between duty and no-duty; conduct creating risk to another is.

Id. at 871 (quoting *Satterfield*, 266 S.W.3d at 362–63, and Restatement (Third) of Torts: Liab. for Physical and Emotional Harm § 37, Reporter's Note, cmt. c (October 2017 Update)). The negligent

¹⁷ In *Satterfield*, the court found no need to consider the existence of a relationship, holding instead that the defendant’s alleged conduct in creating a danger gave rise to a duty to protect others foreseeably at risk of harm from its misfeasance. *See Satterfield*, 266 S.W.3d. at 364 (holding that the case “turn[ed] on the employer’s own misfeasance—its injurious affirmative act of operating its facility in such an unsafe manner that dangerous asbestos fibers were transmitted outside the facility to others who came in regular and extended close contact with the asbestos-contaminated work clothes of its employees”).

home inspector did not create the risk of harm—the negligent builder had created the risk by building an unstable deck. The home inspector simply failed to notice the problem.

As the court explained:

In the comments to section 37, the authors of the Restatement give an illustration that mirrors this case: an inspector fails to identify a source of harm during an inspection, and a person is injured by that source of harm. In the Restatement’s illustration, the inspector’s “conduct did not create a risk of harm” to the injured person, so whether the inspector had a duty of care would be governed by the Affirmative Duties chapter of the Restatement (Third) of Torts, which includes an update to Restatement (Second) of Torts section 324A, Liability to a Third Person for Negligent Performance of an Undertaking.⁷ *Id.*, illus. 1. Here, the inspector failed to identify a source of harm, and an injury resulted; thus, based on the reasoning of the Restatement, the defendant home inspector did not create a risk of harm and therefore whether he has a duty of care would be analyzed under theories of affirmative duties rather than the more generalized duty of care evaluated by the *Satterfield* duty factors.

Id. at 81–72 (some internal citations omitted).

Analogizing to similar cases, the court held that the case was properly analyzed under Section 324A of the Restatement (Third) of Torts, which provides that

One who undertakes, gratuitously or for consideration, to render services to another which he should recognize as necessary for the protection of a third person or his things, is subject to liability to the third person for physical harm resulting from his failure to exercise reasonable care to protect his undertaking, if

- (a) his failure to exercise reasonable care increases the risk of such harm, or
- (b) he has undertaken to perform a duty owed by the other to the third person, or
- (c) the harm is suffered because of reliance of the other or the third person upon the undertaking.

Grogan, 535 S.W.3d at 874 (quoting Restatement (Third) of Torts § 324A). “[T]he question of whether one has assumed a duty to act is . . . a question of law.” *Id.* (quoting *Stewart v. State*, 33 S.W.3d 785, 793 (Tenn. 2000)).

“Section 324A describes the services rendered as services which the actor should recognize would be necessary for the protection of a third party.” *Id.* at 374. Under this provision, a duty can be imposed only “to the extent actually assumed by the defendant.” *Id.* (citation omitted). “[T]he foundation of the . . . rule is that the defendant specifically has undertaken to perform the task that he or she is charged with having performed negligently.” *Id.* at 875 (citation omitted). Thus, while a plaintiff “is not bound by the provisions of a contract to which it is not a party,” the terms of an underlying contract may be relevant to defining the scope of the defendant’s undertaking and to “whether a tort duty to others should arise from [its] performance of the contractual obligations.” *Id.* Other evidence, including deposition testimony, may also be relevant. *See id.*; *see also Thompson v. Southland Constructors*, M2019-02060–COAR-3CV, 2020 WL 6538821, at *4 (Tenn. Ct. App. Sept. 2, 2020) (“Tennessee appellate courts addressing situations where an employee of a subcontractor is injured at a workplace have looked to, among other things, the contracts governing the relationships between the landowners, prime contractors, and subcontractors to examine the scope of parties’ respective duties.”); *Oman Constr. Co. v. Tenn. Cent. Ry. Co.*, 370 S.W.2d 563, 575 (Tenn. 1963) (noting that “[t]he existence of a contract may furnish the occasion for a tort obligation” and ruling “there was ample proof introduced at the trial to make an issue for the jury as to negligence on the part of [defendants] in constructing the tunnel beneath plaintiff’s property”).

In *Grogan*, the plaintiff alleged that the inspector failed to find that the deck railing was non-compliant relative to the applicable building code, but the home inspection contract stated that the inspection was “visual only and not a building code inspection,” and the inspector testified that he was not a building codes inspector. *Id.* at 875. In addition, the contract stated that “[n]ot all conditions may be apparent” and that the inspector was not liable for “patent or latent defects in

materials, workmanship, or other conditions.” *Id.* Based primarily on limitations stated in the inspection contract and the inspector’s testimony regarding the scope of his inspection, the court determined that the inspector had not voluntarily assumed any duty beyond that owed to his client pursuant to their agreement. *Id.* at 876.

None of the parties in this case addresses § 324A or its applicability in this case, but the court nonetheless finds, under *Grogan*, that § 324A governs the analysis of Outotek’s duty and that the plaintiff and Nyrstar have failed to establish that Outotec undertook to protect the plaintiff from the specific risk at issue. Under the Outotec Management Agreement, Outotec agreed, as relevant here, to comply with “Nyrstar’s Policies and Procedures” and to provide personnel to fill various roles in connection with the rebuilding of the roaster, including a Safety Manager. (Outotec Management Agreement, Doc. No. 51-7, at 7, 14.) Its safety management obligations theoretically included such tasks as “review[ing] and lia[is] with contractors on risk assessments and safety plans, conducting “in the field safety supervision,” and developing and facilitating “workable solutions as needed . . . to maintain safety performance expectations.” (*Id.* at 15.) In addition, Outotec, pursuant to the Outotec Management Agreement, attended the risk assessment meeting conducted for purposes of the roaster rebuild project on July 3, 2019 (*see* Bravo Dep. 183), during which the possibility of exposure to sulfur dioxide was acknowledged and assessed as a potential risk to personal safety onsite. Because it participated in developing the safety plan, which included requiring McDougall to install two sulfur dioxide monitors as well as fans (*see* Bravo Dep. 110), Outotec knew that the roaster was emitting sulfur dioxide and that sulfur dioxide exposure posed some risk to personal safety.

However, the plaintiff in this case argues only that Outotec shared responsibility to warn, to ensure necessary PPE, and provide training for the sulfur dioxide exposure, given that there was

a known risk. (See Doc. No. 63, at 8.) As Outotec points out, Cook specifically acknowledged that Outotec did not have a duty to provide PPE, warn any individual employees about sulfur dioxide, or provide training to individuals. (Cook 2023 Dep. 280–81, 325–26.) Moreover, Outotec agreed to take on safety responsibilities related specifically to building the new roaster and demolishing the old roaster. There is no evidence (or even argument) that Outotec had a responsibility to independently assess the risk posed by the sulfur dioxide emissions or to impose stricter or more comprehensive mitigation efforts or safety policies than those devised by Nyrstar.

To the contrary, it was tasked (at most) with ensuring that other contractors complied with Nyrstar’s safety policies. As set forth above, Nyrstar disseminated safety guidelines to the various contractors working on the project (including McDougall), who were then supposed to ensure that their employees and subcontractors reviewed and followed such guidelines, and Nyrstar expected all of its contractors’ employees and subcontractors’ employees to comply with the “relevant and applicable safety policies and procedures disseminated.” (Doc. No. 47, Nyrstar SUMF ¶ 14.) But, aside from certain measures agreed upon by Nyrstar and McDougall and undertaken by McDougall—including the installation of two personal sulfur dioxide monitors and some fans in the fabrication area and establishing a safety muster area—there is no suggestion that any of Nyrstar’s safety measures covered the risk of exposure to sulfur dioxide outside McDougall’s fabrication area or the roaster itself. Outotec cannot have been responsible for implementing safety measures beyond those approved by Nyrstar, as Nyrstar admitted that Outotec “couldn’t unilaterally make decisions about policies and procedures at the Nyrstar facility.” (Cook 2023 Dep. 193.)

In other words, Outotec, in agreeing to provide safety management for the roaster project did not incur any duty relating to the *preexisting problem* of the sulfur dioxide leak that would

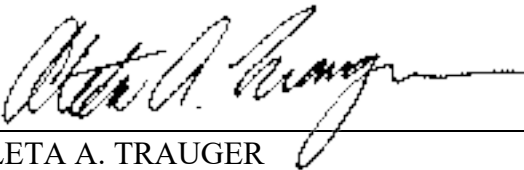
have required it to make sure that McDougall and/or ICI took measures *beyond* those required by Nyrstar and the safety plan it put in place. Nyrstar, in effect, is asking Outotec to indemnify it for a risk created by Nyrstar—one that Nyrstar’s safety plan did not adequately address and that is not specifically mentioned in the Outotec Management Agreement. Applying Restatement § 324A, (a) Outotec’s alleged failure to exercise reasonable care did not increase the risk of harm, because the harm preexisted Outotec’s involvement; (b) Outotec did not undertake to perform any duty relating to ambient exposure to sulfur dioxide outside the immediate roaster fabrication area, except insofar as that risk was created or exacerbated by activity connected with the roaster rebuild project; and (c) neither the plaintiff nor Nyrstar relied on Outotec to protect workers from the particular harm incurred in this case.¹⁸

In sum, for purposes of Outotec’s motion, it is undisputed that Nyrstar at all times remained responsible for formulating the safety policies in effect during the roaster rebuild project and covering all workers engaged in that project. Outotec did not incur a duty with respect to any risks outside the scope of the safety plans it was supposed to help implement. Because the risk of exposure to ambient sulfur dioxide gas on Nyrstar’s grounds, outside the immediate fabrication area, was apparently not a risk that Nyrstar specifically addressed or delegated to Outotec, Outotec cannot be deemed to have taken on a duty to protect workers on the project from that risk.

¹⁸ Thus, arguably, if some employee of McDougall or another subcontractor had an accident on Nyrstar’s site during the roaster rebuild project—punctured a conduit carrying sulfur dioxide gas, for example—that created a wholly new and separate risk of sulfur dioxide exposure, Outotec might have borne some responsibility for overseeing the mitigation and repair of that problem and, hypothetically, some responsibility for injuries later suffered by other employees as a result of its negligent failure to act to prevent that type of accident or negligent failure to oversee its repair. Likewise, if some additional sulfur dioxide risk was created by Outotec’s demolition of the old roaster, it clearly may have incurred liability in connection with any resulting injuries. But neither of these scenarios is close to what is alleged to have happened here.

V. CONCLUSION

For the reasons set forth herein, the court will deny Nyrstar's Motion for Summary Judgment (Doc. Nos. 45) and grant Outotec's Motion for Summary Judgment (Doc. No. 51). An appropriate Order is filed herewith.



ALETA A. TRAUGER
United States District Judge